

The background of the slide is a photograph of a green chalkboard. Two pieces of pink chalk are lying on the board, one standing upright and the other lying horizontally. There are some faint, white chalk markings on the board, including a large 'A' and some curved lines. The text is overlaid on this background.

# Grades 6 through High School Algebra Mathematics Information and Recommendations

***Beverly Hills Unified School District  
March 24, 2009***

# **AGILE MIND**

## **Academic Youth Development**

**Jennifer Goolsby**

**Joshua Glass**

**Brian Tash**



# ACADEMIC YOUTH DEVELOPMENT

- **Bridging program**
- **Eases a student's transition into high school**
- **Eases a student's transition into algebra**
- **Helps students gain knowledge and skills to change their conceptions of themselves as learners**
- **Two components: Mathematics and Youth Development**



# MATHEMATICS

- **Focuses on problem solving**
- **Focuses on the use of multiple representations to solve problems**
- **Connects prior learning to new concepts that students will experience in high school Algebra**



# YOUTH DEVELOPMENT

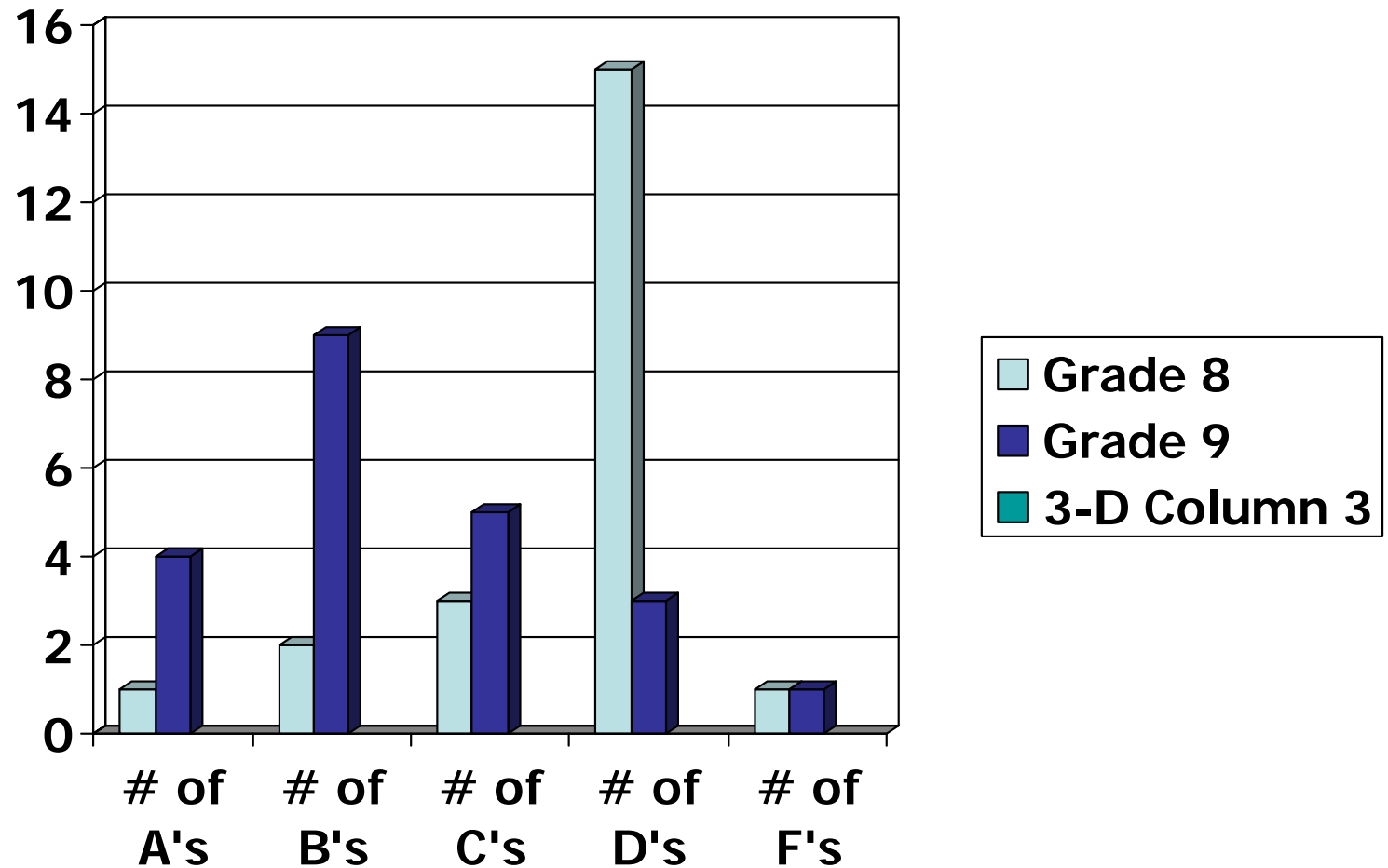
- **Focuses on effective effort**
- **Focuses on developing meta-cognitive and communication skills that support learning**

# RELATIONSHIPS

- **Students make new friend from other K-8 schools**
- **Students build relationships with the AYD teachers**
- **Students are scheduled into the AYD teacher's Algebra class in fall**



## Final Grade (8<sup>th</sup>) vs. First Semester Grade (9<sup>th</sup>)



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# Grade 6 through Algebra Recommendations for Fall 2009

*Mathematics Advisory Committee  
Beverly Hills Unified School District  
March 24, 2009*



## Purpose

- **Examine our math program from grades 6 through high school Algebra I**



## Current Practice: Grades 6 and 7

- **Grade 6**
  - *Honors Mathematics*
  - *Regular Mathematics*
  - *Before school support at one school site*
- **Grade 7**
  - *Honors Mathematics*
  - *Regular Mathematics*
  - *One period of support at all four school sites, with two different programs (Carnegie Learning and the MIND Institute)*



# Current Practice: Algebra

- **Grade 8**
  - *Honors Algebra*
  - *Algebra*
  - *Algebra A*
  - *One period of support at three of four K-8 schools, three different programs*
- **High School**
  - *Algebra*
  - *Algebra B*
  - *Algebra A, all four sections being co-taught*



## Committee Composition

- All 6<sup>th</sup> through HS mathematics teachers and K-12 administrators were invited to participate
- Seven Teachers
  - *Four middle school math teachers*
  - *Three high school math teachers*
- Two Administrators
- Facilitator
- Six after school meetings, from January 13<sup>th</sup> through March 10<sup>th</sup>



# Committee Process

- **Interest Based Problem Solving model**
  - *Share history of math courses, teaching, curriculum, concerns, and successes in the BHUSD*
  - *Identify the issue:*
    - “How can we prepare all students for success in Algebra or the next math course?”*
  - *Develop interests*
  - *Brainstormed options*
  - *Consensus recommendation*



# Recommendations

- **Grade Six**

- ***Maintain Honors and Regular mathematics courses***
- ***Add support for struggling students***
  - **Before school, after school, or during school (staffing/master schedule permitting)**
  - **Use a consistent model at each school site, with consistent placement guidelines**
- ***Revise placement guidelines***



# Recommendations

- **Grade Seven**

- ***Maintain Honors and Regular mathematics courses***
- ***Continue support classes at each school site***
  - **Use a consistent model at each site with consistent placement guidelines**
- ***Revise placement guidelines***

## Data: Grade 8 to Grade 9

Grade 7 Math CST				Grade 8 General Math CST			
Year	Basic or Below	Total	Percent	Year	Basic or Below	Total	Percent
2005	127	435	29%	2005	92	217	42%
2006	120	435	28%	2006	81	183	44%
2007	130	420	31%	2007	78	141	55%
2008	100	426	23%	2008	58	105	55%

2008-2009 Semester 1 Marks		
Grade 9	TOTAL	D or F
Algebra A	60	45%
Algebra B	54	39%
Algebra I	123	12%



# Recommendations

- **Grade Eight**
  - ***Maintain Honors Algebra and Algebra I courses***
  - ***Eliminate Algebra A course***
  - ***Implement state approved Algebra Readiness course***
  - ***Develop and implement a consistent support course for struggling Algebra I students***
  - ***Align grade 8 Algebra homework policy to the high school homework policy***
  - ***Revise placement guidelines***



# Algebra Readiness

- **State approved course and curriculum**
- **State adopted textbooks**
- **Master prealgebraic skills and concepts in preparation for Algebra I**
- **Closely aligned with General Mathematics CST**

# Data: High School Algebra

2008-2009 Semester 1 Marks		
	Total Students	D or F
Algebra A	88	50%
Algebra B	246	30%
Algebra I	145	17%

HS Algebra B Students: Algebra I CST		
Year	Total Students	Percent of Students Basic and Below
2005	133	51%
2006	140	36%
2007	187	55%
2008	123	63%



# Recommendations

- **High School**

- *Maintain Algebra I course*
- *Eliminate Algebra A, Algebra B sequence*
- *Implement Conceptual Algebra course*
- *Develop and implement a consistent support course for struggling Algebra students, grades 9-12*
- *Mandatory support for struggling incoming 9<sup>th</sup> grade students*
- *Revise placement guidelines*



# Conceptual Algebra

- **State approved textbooks**
- **Covers all Algebra I standards**
- **Emphasis on different approach to instruction**
  - ***Investigation***
  - ***Exploration***
  - ***Collaboration***
  - ***Problem solving based***



## Next Steps

- **Grade six Support class development**
- **Grade seven Support Class development**
- **Algebra Readiness: textbook selection, pacing/curriculum, assessments**
- **Grade 8 Algebra I Support Class development**
- **Conceptual Algebra: textbook selection, pacing/curriculum, assessments**
- **HS Algebra I Support Class development**